

Amendment To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method for electrofilling a metal or alloy inside at least one opening located in a front surface of a substrate, said front surface of the substrate comprises the at least one opening and a top field surrounding the at least one opening, said at least one opening comprises a bottom and side walls surfaces wherein at least the bottom surface comprises an exposed metallic surface, said method includes steps of:

immersing the substrate in an activation or wetting solution;

applying ultrasonic or megasonic vibrations to the substrate and to the activation or wetting solution; and

after commencing ultrasonic or megasonic vibrations:

applying high pressure jets of an electrolyte to the substrate, said electrolyte comprises metallic ions of said metal or alloy; and

applying an electroplating current to the substrate to electroplate said metal or alloy inside the at least one opening.

Claim 2 (previously presented): The method of claim 1 wherein the electrolyte further comprises at least one inhibitor additive.

Claim 3 (previously presented): The method of claim 2 wherein the activation or wetting solution is different than the electrolyte.

Claim 4 (previously presented): The method of claim 2 wherein the activation or wetting solution is the same as the electrolyte.

Claim 5 (previously presented): The method of claim 4 wherein the steps of immersing the substrate in an activation (or wetting) solution, applying ultrasonic or megasonic vibrations to the substrate, applying high pressure jets of an electrolyte to the substrate, and applying an electroplating current to the substrate, are performed in the same chamber.

Claim 6 (previously presented): The method of claim 5 wherein the step of applying ultrasonic or megasonic vibrations to the substrate is extended to coincide with at least a portion of the steps of applying high pressure jets of an electrolyte to the substrate, and applying an electroplating current to the substrate.

Claim 7 (previously presented): A method for electroplating a metal or alloy inside at least one opening surrounded by a field on a substrate, said at least one opening comprising sidewalls surfaces, wherein at least the field and the sidewalls surfaces comprise an exposed metallic surface, and the method comprising the steps of:

- (a) immersing the substrate in an activation or wetting solution;
- (b) applying ultrasonic or megasonic vibrations to the substrate and to the activation or wetting solution; and
- after commencing step (b):
- (c) applying high pressure jets of an electrolyte to the substrate, said electrolyte comprising metallic ions of said metal or alloy and at least one inhibitor additive; and
- (d) applying an electroplating current to the substrate to electroplate said metal or alloy inside the at least one opening.

Claim 8 (previously presented): The method of claim 7 wherein the activation or wetting solution is different than the electrolyte.

Claim 9 (previously presented): The method of claim 7 wherein the activation or wetting solution is the same as the electrolyte.

Claim 10 (previously presented): The method of claim 7 wherein steps (a) and (b) are performed in one chamber, and steps (c) and (d) are performed in another chamber.

Claim 11 (previously presented): The method of claim 9 wherein steps (a), (b), (c), and (d) are performed in the same chamber.

Claim 12 (previously presented): The method of claim 11 wherein step (b) is extended to coincide with at least a portion of steps (c) and (d).

Claim 13 Cancelled.

Claim 14 Cancelled.

Claim 15 Cancelled.

Claim 16 Cancelled.

Claim 17 Cancelled.

Claim 18 Cancelled.

Claim 19 Cancelled.

Claim 20 Cancelled.

Claim 21 (new): The method of claim 3 wherein said bottom and sidewalls surfaces of the at least one opening comprise an exposed metallic surface.

Claim 22 (new): The method of claim 3 wherein only the bottom surface of the at least one opening comprises an exposed metallic surface and the sidewalls surfaces are non-metallic.

Claim 23 (new): The method of claim 5 wherein said bottom and sidewalls surfaces of the at least one opening comprise an exposed metallic surface.

Claim 24 (new): The method of claim 5 wherein only the bottom surface of the at least one opening comprises an exposed metallic surface and the sidewalls surfaces are non-metallic.

Claim 25 (new): The method of claim 8 wherein the at least one opening includes a bottom surface comprising an exposed metallic surface.

Claim 26 (new): The method of claim 8 wherein the at least one opening has no bottom surface.

Claim 27 (new): The method of claim 11 wherein the at least one opening includes a bottom surface comprising an exposed metallic surface.

Claim 28 (new): The method of claim 11 wherein the at least one opening has no bottom surface.